REMARKS

Claims 1-16 are pending in the present application with claims 12-15 amended. The Examiner finally rejected claims 1-16 under 35 U.S.C. § 102(b) as being anticipated by Mohrbacher (US 5602356). Reexamination and reconsideration are respectfully requested.

Applicant has amended claims 12-15 to more clearly claim the invention. Applicant does not believe that the amendment raises any new issues or requires additional searches.

The present invention relates to a method and apparatus for producing a waveform. The method and apparatus can produce a waveform based on "style-of-rendition identification information." The identification information represents a style of rendition, such as vibrato, used in a musical performance.

Mohrbacher discloses a system to assist a student to a play a musical performance. In one embodiment, a studio musician records a music data track while listening to and/or watching a pre-recorded performance 18 (see Fig. 1). The music data track is embedded, as musical note assistance data, in VBI scan lines and ultimately applied to a mass media 20, such as videotape (Col. 10, 21-29). When the mass media 20 is played on mass media player 22 of Fig. 1, the musical note assistance data is provided to the student's instrument 10. As the student plays the performance (perhaps while viewing a replay of the pre-recorded performance 18), the musical note assistance data ensures that the student's musical performance is consistent with the live performance. For example, the musical note assistance determines the scale so that the student plays in the correct scale.

The Examiner contends that the studio musician's recording of the performance 18 is done with a style of rendition and its resulting data – the musical note assistance data – is used for producing music by the student. Thus, the Examiner contends that Mohrbacher discloses "receiving style-of-rendition identification information representing a style of rendition used in a musical performance corresponding to a waveform to be produced."

The musical note assistance data, however, is merely note data. It does not identify a style of rendition. This is particularly clear when one examines what is actually embedded in the VBI scan lines as musical note assistance data. The VBI scan lines include six data items: <FLAG-1>, <MELODY-1>, <BASS-1>, <CHORD-6>, <SCALE-2> and <PROGRAM-4> (see Col. 11, lines 26-32).

<FLAG-1> relates to the data structure of the scan line, while <PROGRAM-4> relates to sound assignments. Neither of these have any relation to identifying styles of rendition. The four other data items all relate to allocating tones and scales to operators. <MELODY-1> and <BASS-1> relate to the current melody and bass note respectively. <CHORD-6> relates to the notes applied the vanes of the instrument 10, while <SCALE-2> relates to scale.

None of the six data items, thus, relates to identifying styles of rendition. Identifying scale or note data is not the same as identifying the style-of-rendition. One may be able to surmise the style of rendition by playing a series of note data, but this is very different from utilizing information that actually identifies the style of rendition.

In his comments on page 4, the Examiner refers to Mohrbacher as teaching the notation of the studio musician's rendition. The Examiner has not provided a citation. Applicant is assuming that the Examiner is referring to the musical note assistance data as somehow visually indicating the score of the studio musician's rendition. Applicant does not believe that Mohrbacher discloses such a visual score but, even if it did, it would not disclose the use of style-of-rendition identification information. While the studio musician's rendition may be reproduced – aurally or maybe even visually – by the musical note assistance data, it is not being created on the basis of data that identifies the style of rendition. Rather, it is being created by note data, such as <MELODY-1>, <BASS-1>, <CHORD-6>, <SCALE-2>, which merely allocate tone pitches and scales. Accordingly, Applicant respectfully submits that claim 1 is not anticipated by Mohrbacher, because Mohrbacher fails to disclose the step of receiving style-of-rendition identification information.

In the previous Amendment, Applicant also contended that Mohrbacher failed to disclose the step of a generating a packet stream in accordance with the style-of-rendition identification

la-739436

information received by said step of receiving. Applicant notes that Mohrbacher's failure to disclose style-of-rendition identification information precludes it from generating a packet stream in accordance with such information. The Examiner's citation to Col. 42, lines 50-65 only emphasizes this conclusion. The cited section discloses that the musical note assistance data can reproduce the studio musician's performance. However, as discussed above, the performance is reproduced on data that allocates tones and pitches and not on data that identifies the style of rendition.

Applicants respectfully submit that he has clearly shown patentable differences between the claim recitations of claim 1 and Mohrbacher and that, accordingly, claim 1 is not anticipated by Mohrbacher. Dependent claims 2-8 and 16 and independent claims 9, 10 and 11 are not anticipated by Mohrbacher for at least the reasons set forth above.

Claim 12 recites receiving a packet stream, arranging vector data corresponding to the packets and producing a waveform on the basis of the arranged vector data. Support for claim 12 may be found in Fig. 12. Fig. 12 illustrates that the vector data is used to produce the waveform, as recited in claim 12. In contrast, what the Examiner has cited as "vector data" in Mohrbacher – sample amplitudes and times – is not used to produce a waveform but rather is used for synchronization.

The discussion beginning at Col. 47, line 15 of Mohrbacher relates to synchronizing the pre-recorded performance 18 with the performance played by the student on instrument 10. To do this, the audio envelope of the pre-recorded performance 18 is sampled and is compared to the similarly sampled performance of the student. The amplitudes and times of the samples for performance 18 and the student's performance are compared pursuant to the Equation 2 at Col. 47, line 60. If the error (i.e., the difference) between the samples is below a certain threshold, the signals are synchronized. At that point, sampling is terminated and synchronization is achieved (see Col. 48, line 65 to Col. 49, line 2 and Col. 50, lines 37-39). Thus, the samples (with their amplitudes and times) are not used for producing a waveform but rather determining synchronization. If the sampling was used to produce a waveform as the Examiner contends, then the sampling would never terminate once synchronization is achieved. Accordingly, Applicant respectfully submit that the claim 12 is not anticipated by Mohrbacher.

la-739436

Applicant respectfully submits that independent claims 13-15 are not anticipated by Mohrbacher for at least the reasons set forth above with respect to claim 12.
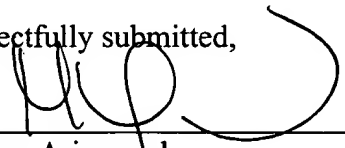
In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue.

If, for any reason, the Examiner finds the application other than in condition for allowance, Applicant requests that the Examiner contact the undersigned attorney at the Los Angeles telephone number (213) 892-5630 to discuss any steps necessary to place the application in condition for allowance.

In the unlikely event that the transmittal letter is separated from this document and the Patent Office determines that an extension and/or other relief is required, Applicant petitions for any required relief including extensions of time and authorizes the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to **Deposit Account No. 03-1952** referencing docket no. 393032020000.

Dated: November 4, 2004   Respectfully submitted,

                                            By_____
                                            Mehran Arjomand
                                               Registration No.: 48,231
                                            MORRISON & FOERSTER LLP
                                            555 West Fifth Street, Suite 3500
                                            Los Angeles, California 90013
                                            (213) 892-5200